

The Irrational Nature of Choice: A New Model for Advising Undecided Students?

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This article examines advising undecided students in today's information age. Long established cultural paradigms associated with decision making are presented and challenged. A new model which advocates a less rational approach is advocated.

Abundant anecdotal evidence suggests that many students decide upon a major by mere chance. Their stories resemble familiar clichés: "I trusted my gut"; "I did what felt right"; or "I followed a hunch." The continued use of such phrases suggests that they are not meaningless expressions, but contain some validity.

A major role of academic advisors involves assisting undecided students with the selection of a major. Indecision is not limited to students without a major. Research has indicated that most students with declared majors acknowledge some level of uncertainty or tentativeness (Titley & Titley, 1980). People of western culture have generally responded to uncertainty with rationality. Advisors also seem to provide rational suggestions to undecided students.

From a broad cultural context, examination of advising calls into question the assumption that all decisions should adhere to logical guidelines. In expecting the decision-making process to conform to rational criteria are advisors limiting students' opportunities? What less rational approaches can advisors employ to help students make better decisions?

The variety of narrow definitions of academic advising offered in the literature are helpful. Absolute definitions allow for reflection upon the various roles of advisors; however, precise definitions predominantly come from psycho-social/counseling disciplines. Perhaps a model that acknowledges and defines the advisor's role in today's information-intensive society might be useful.

Changes to an information-based economy have challenged traditional advisor roles. While not representing areas of change, individual and societal epistemologies continually confront academic advisors. Presentations of recent changes and traditional demands that have combined to create an intractable challenge for advising are included here. A preliminary advising model that considers the less rational aspect of the decision-making process is offered to answer the question: "What can be done to better help student decision making?"

How Has the Decision-Making Process Changed?

Technological advances have made life easier. Microwave ovens, fax machines, and video cassette recorders make people work more efficiently. Technology, however, not only changes the practical world, but also alters the way people view the world. Airplanes changed how distance is considered. Telephones altered the concept of communication. Telescopes changed the way human beings view themselves in relation to the universe.

Working directly with information was once viewed as a necessary but mundane function. People who handled information were typically low paid office workers who performed simple clerical functions. Today, information is considered a precious commodity. Information is precious because it is rare. Sifting through the labyrinth of disconnected facts and meaningless data takes more and more time; it also makes life more complex and uncertain. German sociologist, Max Weber noted that during the Industrial Revolution, society turned to rational bureaucracies to deal with complexity and uncertainty (Bolman & Deal, 1988). People today are turning to the pinnacle of rationality: the computer.

One recent form of computer technology, the Internet, has become popular. The Internet provides students immediate access to a seemingly infinite supply of information. Recently, an administrator at the Bradley University computer center reported that during the first week the World Wide Web was made available to students in nearly 800 double-occupancy residence hall rooms, it was accessed 21,000 times.

Internet access offers many advantages: electronic communication via E-mail decreases the time lag between the creation and application of new ideas; interdisciplinary cooperation is no longer constrained by distance; information is electronically accessible in more isolated areas. The World Wide Web has notable educational potential. Hypertext acts as a powerful metaphor for change, inviting students to cross traditional disciplinary boundaries and directly illustrating the connections that exist between ideas.

Praise for the Internet, however, has not been unanimous. In fact, the Internet may be indirectly promoting the misconception that the value of information is defined by its accessibility; useful information can be immediately accessed and infor-

mation which is not immediately accessible is useless. For example, in a matter of minutes, the following examples of academic advisement related information can be found on the World Wide Web:

- A plastics manufacturer in Delaware has a job opening for an Accounting Manager. Starting salary: \$50,000–\$55,000.
- Over 3,300 accredited institutions of higher education exist in the U.S. and Canada.
- Daemen College in Amherst, NY offers a graduate degree in physical therapy.

The speed at which one could come across the information has no connection to its inherent value. In the book, *Silicon Snake Oil*, Clifford Stoll (1995) argues that much of the hype surrounding the Internet is based on the faulty premise that convenient access to more information is the answer to all problems. This statement is very applicable when considering undecided students. Students probably find the Internet alluring because it quickly provides concrete information. While this may be true, the question is “Does the Internet provide helpful information?”

To answer the question, several researchers (Ackoff, 1978; Davis & Botkin, 1994; Tobin, 1993) have offered information hierarchies as ways to identify different types of information.

Data
Information
Knowledge
Understanding
Wisdom

Data represent information in raw form. Data alone are often perceived as meaningless because they are disconnected from context. Data are important. Declaring a major cannot take place without a minimal amount of data. Data alone, however, do not ensure success.

Whereas any isolated fact can represent datum, information has a more specific function. Peter Drucker (1988) describes information as “. . . data endowed with relevance and purpose” (p. 46). Information lessens uncertainty; it provides previously unknown intelligence. Information is generally more useful than data. Information, however, is only useful if it relates to a subject that is meaningful. If information only lessens the uncertainty about a topic unrelated to a student’s pursuit of a major, it is useless.

Knowledge represents the acquisition of a certain amount of information about a certain area. Someone who has attained a certain mastery over a particular subject may be described as “knowledge-

able.” Acquiring knowledge requires time—time which the typical student does not amply possess to decide a major. Students, therefore, may seek short-cuts. They may be enticed by magazine articles or television shows promising quick knowledge in the form of “hot careers” or “career planning made easy.” And then, when students cannot confidently proceed with their short-cut career plans, they become frustrated.

Understanding involves comprehending a phenomenon in its entirety. Individuals in western cultures often employ analysis which involves taking ideas apart and learning about the constituent concepts separately. Considering the separate parts of a problem can be helpful; however, analysis probably does not contribute to understanding. Thus a student may be unable to grasp the full import of knowledge. Understanding represents a more intimate connection with the subject matter. Knowledge implies a command over the subject matter. Advisors sometimes note that a student is beginning to understand a concept when the individual realizes the limits of his or her knowledge. Students begin to appreciate and accept the idea that some degree of uncertainty will always exist and that they will never know everything.

Wisdom is the correct application of knowledge. A person is said to be wise if her or his actions are guided by knowledge and understanding. For a student without a major, the decision-making process is his or her central activity. A wise decision is the ultimate goal.

Applying the preceding hierarchy to the Internet reveals that the Internet is full of data and some information, very little knowledge, and no understanding or wisdom. The Internet can provide answers to factual questions. Deciding a major, however, is based on more than the simple accumulation of facts. Considering both individual and group epistemologies, one can see how the traditional American student is drawn to the lower end of the information hierarchy where data abound and little wisdom exists.

What Factors of Decision Making Have Stayed the Same?

The challenge of advising today not only lies with the changing elements of society. Variables which have remained stable continue to confront the professional advisor. Exploration of traditional challenges may further illuminate the dilemma.

Individual Epistemology

Epistemological assumptions are a part of almost every decision an individual makes. Therefore, by

considering a person's "ways of knowing" advisors can better understand how decisions are made. William Perry's (1970) "Scheme of the Intellectual and Ethical Development of the College Years" is commonly used in the study of academic advising. Perry's model illustrates the patterns of intellectual changes that occur between adolescence and adulthood. The model is made up of three stages: dualism, multiplicity, and relativism.

The dualistic stage is characterized by the tendency to interpret information in absolute terms. Information is either right or wrong, good or bad. Student opinions take on a dogmatic quality as they view their own beliefs as facts. The dualistic student tends to have an external locus of control and may see authority figures (e.g., advisors) as sources of uncontested wisdom. The educational and personal experiences of adolescence have probably reinforced this belief. When they seek out advice about potential majors, they may interpret that advice as absolute truth.

The nature of believed knowledge is reflected in how an individual views selecting a major. A student may state that he or she is looking for "that one right major." The student may also see the relationship between a major and a career as linear (e.g., all accounting majors become accountants; all nursing majors become nurses). In reality, such direct career paths tend to be exceptions.

Perry noted that a shift away from dualism begins to occur as students are confronted with the college environment. Student movement to Perry's multiplicity stage is a difficult one. Students' original belief systems begin to lose meaning. They start to acknowledge that one right answer does not exist and to realize that authority figures do not have all of the answers.

Students deal with this newly found ambiguity by constructing a different view of the nature of knowledge. Like dualism, the multiplistic stage is also characterized by students placing information into two categories. However, in this stage the categories are a) those areas made up of fact (in which dualistic principles still apply) and b) those areas made up of opinion.

In the opinion category, no standards exist. The value of information is totally arbitrary. One point of view is just as good as the next.

Academic advisors may begin to note the emergence of the multiplistic stage when a student exhibits total confusion and perhaps even dejection. Students may place deciding a major in the opinion category and see no hope of making a meaningful decision. The decision-making process then becomes a game of chance.

True critical thinking skills emerge when a student enters Perry's final stage, relativism. In this stage, the individual acknowledges that multiple perspectives exist for most issues. Multiple perspectives lead students to an understanding of the subjective nature of decision making. Students abandon dualistic thinking and develop their own personal and unique inclinations about choosing a major.

Societal Epistemology

Just as individuals have epistemological assumptions, entire cultures have shared beliefs related to the nature of knowledge. A better understanding of these collective belief patterns can further add to the understanding of the relationship between culture and decision making. Western civilization's alliance with rationality is said to have begun when early Greek philosophers challenged the popular mythology of the day. Greeks believed that events in nature could be explained through mythology. For example, many weather occurrences were attributed to Zeus, the king of the gods. Lightning was explained as Zeus' wrath; conversely, when Zeus was happy, he sent rain to farmers for their crops. Over time, belief in such stories was replaced with an emphasis on empirical evidence. From ancient times until today, western culture has held to the central idea that the advancement and acquisition of useful knowledge can be attained through the application of reason.

At the turn of the century, Max Weber (Bolman & Deal, 1988) observed that rationality was becoming a transforming characteristic of social institutions. The German sociologist observed how formal organizations were fundamentally changing. Individual craftsmen and small family businesses were being replaced by industrial factories. Weber theorized that these changes were an attempt to cope with the increasing complexity and uncertainty of everyday life. This new passion for order led to new organizations called "rational bureaucracies." According to Weber, bureaucracies are characterized by formal rules and hierarchical structures. Their mechanistic nature was a reflection of western people's valuing of reason and logic.

Rational Decision-Making Models

Western people's traditional concepts of truth, logic, reason, fact, evidence, proof, and knowledge have led to a preferred way of making decisions. The way individuals make decisions is often influenced by their viewpoint on the decision-making process. There is no question that popular contemporary beliefs support the notion that the

ideal decision-making process is a rational one.

Rational choice theory is rooted in economics and states that humans are rational actors motivated primarily by self-interest. von Neumann and Morgenstern's (1944) model, for example, postulated that people make decisions according to the principle of maximizing expected utility. Their model, which assumed that man is primarily motivated by self-interest, relied on mathematical equations to explain behavior. How did this view of decision making become so pervasive? In large part, the idea of rational choice fits neatly with the established notion that human behavior, if studied carefully, can be explained, understood, and even predicted.

Traditionally, rational choice theory has been applied to monetary endeavors like consumer decisions. However, there have been attempts to apply economic theory to more personal areas. In 1992, Gary Becker won the Nobel prize for extending the realm of economic theory to aspects of human behavior which had previously been explored only by the social scientists. Becker (1976) applied economic theory to such social phenomena as racial discrimination, crime, education, and the decision to marry.

Advising professionals, in general, adhere to a rational choice model. Advising undecided students follows a general career-planning model. This model consists of personal interviews and exercises as in paper-and-pencil tests aimed at gathering information about the student's interests, aptitudes, values, and personality. This information is then compared against known work characteristics. The method is a matching process that attempts to maximize returns by predicting the likelihood of a successful decision.

Why is the Decision-Making Process Important?

Deciding on a major requires a student to think for oneself about oneself. This is a significant challenge since most college students have just started making sense out of their lives. Deciding on a major may demand a developmental stage which some students have not yet reached. Dualistic students, for example, rely heavily on logic. They seek concrete facts and look only for rational answers. Consequently, the subjective aspect of decision making is often overlooked.

A student's concept of information depends on her or his epistemological paradigm. Today, advisors work with many dualistic students in an information-flooded culture that is based in the rationalistic western tradition. The Internet, just like Gutenberg's printing press, promises to fundamentally change the way society deals with information. An information-

saturated culture combined with dualistic students creates a significant challenge for advisors. To understand why the Internet is so popular with students, consider the tendency to respond to uncertainty with rationality. Changes in suppositions about the nature of knowledge can alter how individuals perceive their world and make decisions. Advisors must challenge the popular notion that advising means eliminating student uncertainty; the challenge is a major test of the advising profession's foresight and ingenuity.

How Should Advisors Change the Decision-Making Process?

Focus on the Process

Benjamin Franklin (1987) once gave some advice to a friend about how to make an important decision: ". . . I cannot, for want of sufficient premises, advise you what to determine, but if you please, I will tell you how" (pp. 877-878). Franklin's advice applies to advisors and undecided students. The focus needs to be more on the process of choosing a major and less on outcomes. In light of the current emphasis on assessment and outcome measures in education, this focus will not be easily achieved. Ellen Langer (1989, p. 33) points out that "From kindergarten on, the focus of schooling is usually on goals rather than on the process by which they are achieved." Kindergartners learn to write their names; first graders learn to read; and second graders learn to tell time. No wonder undecided students concentrate on "What will I major in?" rather than "How do I make this decision?"

How does one begin to fundamentally change? Academic advisors might start by considering their own behaviors. More specifically, perhaps advisors should consider their interactions with students.

One-on-one student contact remains a core function of advisors. Just as teaching is not simply telling, academic advisement is not simply giving advice. Under a rational model, advisors (and students) tend to see their roles as problem solvers and trouble shooters. Gordon (1995) warns that "too often adviser and student exchange information as though this were the goal of the advising relationship" (p. 93). Advice presented as fact is often mistaken as truth. Advisors become like doctors who dispense prescriptions in the form of advice. To avoid playing this role, consider the following:

Try to find the "question within the question." Sometimes a simple factual question is covering up a far more important concern. For example, how many times have students asked about salary information for a particular profession? Instead of find-

ing the information for students (or referring them to the library), try to find out what they are really asking. Their real questions may be far more complex than queries about simple starting salary estimates.

Consider the context. When responding to a factual question, try to include contextual information. Once the dimension of context is added, information no longer appears to students as certainty but more as a probability given those particular circumstances. For example, when a student asks about math requirements for a particular major, add the context of the student's math background.

Ask more questions. In addition to answering questions differently, most advisors need to consider asking more questions. Laff (1994) argues that raising questions during the advising appointment is one important way that advisors can help students think more critically about their decisions.

Seek informal student contact. For students, the cliché "seeing is believing" is true. They, like most advisors, learn by watching. Advisors need to occasionally ask themselves, "What do students see?" To consider significant student influences, sometimes advisors need to leave the formal advising appointment. True learning often takes place outside of formal advising settings. Therefore, advisors need to foster relationships based more on informal student contact. These situations may best represent true teachable moments.

In addition to individual student contact, some forms of academic advising take place in the classroom. Therefore, advisors must consider how they communicate information to students in the classroom. Traditional lectures may not be the best communication method. When lecturing, teachers and advisors may give the impression that simple answers exist. Information delivered in a lecture format is easily misinterpreted as knowledge. Divergence from such traditional pedagogy can encourage higher level thinking. Informal classroom discussions, for example, can reduce the reliance on simple answers and encourage students to think for themselves.

Finally, an overreliance on computer technology may encourage some students to place the answers to questions above the process necessary to arrive at those answers. This emphasis on product over process discourages reflective thinking. If the Internet fosters curiosity and encourages exploration, then it has succeeded. If, however, the Internet simply places massive amounts of meaningless information at student fingertips, it has failed. Computers and related technologies are very helpful tools, but they do not replace the higher functions of the human brain. Computers function best when they can be used to minimize the more mundane, data manage-

ment aspects of advising. If computers can calculate grade-point averages, figure degree audits, and identify a class conflict quicker and more accurately than an advisor, more time is available for students and advisors to develop rapport and engage in meaningful conversation.

Conclusion

A group of anthropologists visited an Amazon village. The scientists showed the villagers a movie, hoping to get their reactions to the stories depicted on the screen. The villagers' reactions to the movie were completely unexpected. They were amazed when they saw the images literally walk off the screen. The villagers wanted to know where the actors went or whether they had simply vanished. The content of the story turned out to be meaningless; the villagers were fixated on the alien nature of the medium of film.

The culture clash represented in the story, while more extreme, is reminiscent of communicating with an 18-year-old undecided student. Advisors speak of career paths and how one major can lead to multiple professional opportunities, and some students respond with blank stares. The advisor's views of the world does not match the student's experiences. Student dualistic ideas of black and white, right and wrong, do not match an advisor's ideas of competing choices and multiple solutions. Students are blind to the grey areas that advisors see every day. Just as the scientists in the Amazon never guessed that the film would be misunderstood, advisors sometimes assume that students see the world as advisors do.

Today's students seek specific solutions for immediate concerns. If the student is undecided, his or her immediate concern is that uncertainty. Hopefully, what students will eventually realize is that declaring a major does not extinguish uncertainty. Rather, by declaring a major, a student opens a door to a new room filled with another set of difficult questions. The end of one search marks the beginning of the next.

Change is difficult. On the rare occasion that changes occur in higher education, they are often limited to incremental steps within conventional views. Reluctance to change is understandable: moving away from a rational model of decision making means calling into question an elemental way of thinking common in western culture. To be sure, the rational model has served advisors well and still has merit; advisors still benefit in many ways from logical thinking. However, the rational model alone is inadequate in the academic advising context.

Rational assumptions can sometimes obscure, rather than illuminate, the decision-making process. A model that recognizes multiple viewpoints is needed.

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